

Audit



Report

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ACQUISITION OF THE JOINT SYSTEM IMAGERY PROCESSING SYSTEM

Report No. 95-313

September 27, 1995

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Acronyms

ASPJ	Airborne Self-Protection Jammer
BMDO	Ballistic Missile Defense Organization
DARO	Defense Airborne Reconnaissance Office
FYDP	Future Years Defense Program
JSIPS	Joint Service Imagery Processing System
TSSAM	Tri-Service Standoff Attack Missile



INSPECTOR GENERAL
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September 27, 1995

**MEMORANDUM FOR ASSISTANT SECRETARY OF THE NAVY (FINANCIAL
MANAGEMENT AND COMPTROLLER)
ASSISTANT SECRETARY OF THE AIR FORCE
(FINANCIAL MANAGEMENT AND COMPTROLLER)**

**SUBJECT: Audit Report on the Acquisition of the Joint Service Imagery Processing
System (Report No. 95-313)**

We are providing this final report for your information and use. This report addresses management of the Joint Service Imagery Processing System. We considered comments on a draft of this report in preparing the final report.

Comments on the draft of this report conformed to the requirements of DoD Directive 7650.3 and left no unresolved issues. Therefore, no additional comments are required.

We appreciate the courtesies extended to the audit staff. Questions on the audit should be directed to Mr. Rayburn H. Stricklin, Audit Program Director, at (703) 604-9051 (DSN 664-9051) or Mr. Thomas S. Bartoszek, Audit Project Manager, at (703) 604-9014 (DSN 664-9014). See Appendix E for the report distribution. The audit team members are listed inside the back cover.

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Assistant Inspector General
for Auditing

Office of the Inspector General, DoD

Report No. 95-313
(Project No. 5AL-0004)

September 27, 1995

**ACQUISITION OF THE JOINT SERVICE
IMAGERY PROCESSING SYSTEM**

EXECUTIVE SUMMARY

Introduction. The Joint Service Imagery Processing System (JSIPS) was intended to provide combat commanders with enhanced capabilities to receive, process, exploit, and report imagery. The JSIPS would obtain its imagery data from theater, national, and tactical sources.

In 1986, the Services signed a Joint Service Memorandum of Agreement that designated the Air Force as the lead Service for the JSIPS Program. The JSIPS Program was managed by the Joint Program Office, Hanscom Air Force Base, Massachusetts, under the direction of the Designated Acquisition Commander for Command, Control, Communications, Computers, and Intelligence.

Originally, the Services planned to procure * JSIPS units. However, in 1994, the Services reduced their planned procurements to three JSIPS units due to funding constraints. The Joint Program Office estimated that the three units would cost about \$ * million, including the cost of research, development, test, evaluation, low-rate initial production, and modifications through FY 2001. As of March 2, 1995, about \$ * million of the \$ * million remained to be spent. The DoD planned to spend an additional \$ * million for the Navy's Tactical Input Segment and the Marine Corps' Tactical Exploitation Group, alternative imagery processing systems.

Objectives. The overall audit objective was to determine whether the JSIPS Program was being cost-effectively developed and procured. The audit was made using the Inspector General's "Critical Program Management Elements for Auditing Major Acquisition Programs" for a system in the engineering and manufacturing development phase of the acquisition cycle. We also evaluated the adequacy of management controls that were related to the program management elements that we evaluated. We did not evaluate the program management element of requirements evolution and affordability because those matters were being evaluated as part of Project No. 4RC-0055, "Audit of the Interoperability of Imagery Dissemination Systems," announced November 9, 1994.

Audit Results. The JSIPS Program generally was well managed considering the significant changes in the scope of the Program. The JSIPS Program experienced two

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problems typical of joint programs: unilaterally reduced requirements and related funding constraints. Other joint programs experienced similar problems (Appendix A). Management controls for the JSIPS program were adequate.

Due to the significant reduction in the size of the JSIPS Program, we performed only limited reviews and evaluations of the program management elements. However, our audit disclosed a condition that warrants additional management action. Specifically, the Joint Program Office, in coordination with the Air Force Operational Test and Evaluation Center, canceled its plans to operationally test and evaluate JSIPS units. As a result, the DoD will not fully know the operational effectiveness, suitability, and utility of JSIPS units before they are upgraded and used in an operational environment. See the finding in Part II.

Potential Benefits of the Audit. Establishing measures of effectiveness and having operational test data available will help the Joint Program Office assess the operational effectiveness and suitability of the JSIPS units to determine what additional changes are needed to the JSIPS units when the Joint Program Office upgrades them. The potential benefits are summarized in Appendix C.

Summary of Recommendations. We recommend establishing measures of effectiveness for determining the effectiveness and suitability of JSIPS units, performing a user evaluation in a planned exercise to measure the effectiveness and suitability of the JSIPS units, and correcting problems identified during the user evaluation in upgrades to the two JSIPS engineering and development units.

Management Comments. Both the Navy and the Air Force concurred with the finding and support a user evaluation. The Navy stated that before the next scheduled upgrade of JSIPS units in FY 1997, the Marine Corps will participate in a joint exercise to demonstrate the JSIPS mobility and conduct a thorough user evaluation. With funding from the Defense Airborne Reconnaissance Office, the Marine Corps tentatively plans to participate in a joint exercise "Kernel Blitz" scheduled for 1996. See Part II for a discussion of management comments and Part IV for the complete text of management comments.

Audit Response. Management comments were responsive to the recommendations. Therefore, no additional comments are required.

Table of Contents

Executive Summary	i
Part I - Introduction	
Background	2
Objectives	3
Scope and Methodology	3
Management Controls	4
Prior Audits	4
Other Matters of Interest	5
Part II - Finding and Recommendations	
Operational Testing	8
Part III - Additional Information	
Appendix A. Prior Audit Coverage	14
Appendix B. Audit Conclusions on Other Matters	19
Appendix C. Summary of Potential Benefits Resulting From Audit	20
Appendix D. Organizations Visited or Contacted	21
Appendix E. Report Distribution	23
Part IV - Management Comments	
Department of the Air Force Comments	26
Department of the Navy Comments	28

Part I - Introduction

Background

The Joint Service Imagery Processing System (JSIPS) was intended to provide combat commanders with enhanced capabilities to receive, process, exploit, and report imagery. The JSIPS would obtain its imagery data from theater, national, and tactical sources.

In 1986, the Services signed a Joint Service Memorandum of Agreement that designated the Air Force as the lead Service for the JSIPS Program. In August 1987, the Joint Program Office awarded a fixed-price incentive fee contract to E-Systems, Incorporated, to develop three JSIPS units at a target price of \$109.5 million. The Joint Program Office subsequently restructured the JSIPS Program and reduced the quantities in the development contract from three JSIPS units to two JSIPS units: one unit each for the Army and the Marine Corps.

In July 1992, the DoD designated the JSIPS Program as an Acquisition Category 1C program; in February 1993, the Air Force Systems Acquisition Review Council approved low-rate initial production for one JSIPS unit for the Air Force. In September 1993, the Joint Program Office awarded a \$51.5 million firm-fixed price contract to E-Systems, Incorporated, for the production of one JSIPS unit for the Air Force. That contract provided for significant upgrades beyond the developmental JSIPS units.

In November 1993, the Deputy Secretary of Defense created the Defense Airborne Reconnaissance Office (DARO), under the Under Secretary of Defense for Acquisition and Technology, to unify existing airborne imagery architectures and enhance the management and acquisition of manned and unmanned airborne imagery assets.

In December 1993, the Army asked the Under Secretary of Defense for Acquisition and Technology to be excused from the JSIPS Program, citing growth in acquisition, operations, and maintenance costs, as well as reductions in Army funding, as reasons for the request. The Under Secretary excused the Army from the JSIPS Program in January 1995.

In January 1994, the DARO studied the JSIPS Program and found that the Program had a \$74 million funding shortfall in the Future Years Defense Program (FYDP). The DARO recommended that the Joint Program Office only field the three JSIPS units that it had bought, discontinue new procurements of JSIPS units, restructure the JSIPS Program to reflect changes in the Program, take advantage of off-the-shelf technology, and update the baseline for the JSIPS Program to reflect the revised requirements. The DARO also recommended migrating all imagery systems to a common imagery ground

station system to achieve interoperability with the Services. In April 1994, the Chairman of the Joint Requirements Oversight Council approved the DARO recommendations.

Objectives

The overall objective of the audit was to determine whether the JSIPS Program was being cost-effectively developed and procured. We made the audit in accordance with the Inspector General, DoD, program management element approach for a system in the engineering and manufacturing development phase of the acquisition cycle. As such, the audit provided for reviews of acquisition planning and risk management, engineering and manufacturing, logistics and other infrastructure, test and evaluation, contract performance measurement, contracting, and management controls related to those objectives. However, due to the significant reduction in the size of the JSIPS Program, we performed only limited reviews and evaluations of the program management elements. We did not evaluate the program management elements on requirements evolution and affordability since those matters are being evaluated under Project No. 4RC-0055, "Audit of the Interoperability of Imagery Dissemination Systems," announced November 9, 1994.

We did not identify matters warranting management's attention in the program management elements for acquisition planning and risk management, engineering and manufacturing, logistics and other infrastructure, contract performance measurement, and contracting (Appendix B). However, we identified an issue in contracting that is discussed in the "Other Matters of Interest" section of this report. Part II discusses a finding and recommendations stemming from our evaluation of the program management element of test and evaluation. Appendix C summarizes the potential benefits resulting from the audit.

Scope and Methodology

We conducted this program audit from October 1994 through April 1995. The audit was made in accordance with auditing standards issued by the Comptroller General of the United States, as implemented by the Inspector General, Department of Defense, and accordingly included such tests of management controls as were deemed necessary. We reviewed records and supporting documentation, dated from January 1987 through April 1995. Those records

Introduction

and documents included acquisition plans, negotiation memoranda, contract files, field pricing reports, the Joint Integrated Logistics Support Plan, the Software Configuration Management Plan, the Test and Evaluation Master Plan, report on testing results, and cost performance reports. We did not rely on computer-generated data to develop our audit conclusions. Appendix D lists the organizations that we visited or contacted during the audit.

Management Controls

We evaluated management controls over the program management processes for the JSIPS Program. In assessing the management controls, we reviewed the vulnerability assessments of the Deputy Director for the Reconnaissance Intelligence Product Group Management Division, Intelligence Information Warfare Systems Program Office, to determine the levels of risk that he assigned to his organization's functional responsibilities. The vulnerability assessments showed that he assigned moderate risk for the JSIPS acquisition. We also reviewed the last annual certification on management controls by the System Program Director for Intelligence Information Warfare Systems Program Office to determine whether he reported material weaknesses related to the acquisition management of the JSIPS Program. He did not report any deficiencies related to the JSIPS Program.

Our audit identified no material management control weaknesses as defined by DoD Directive 5010.38, "Internal Management Control Program," April 14, 1987. The portions of the DoD management control program applicable to acquisition management of the JSIPS Program were effective.

Prior Audits

Since January 1990, the JSIPS Program had been the subject of two audits. In addition, several audits have identified joint programs that experienced problems similar to the problems that the JSIPS Program experienced in maintaining stable requirements and funding levels. Appendix A discusses the two prior audits on the JSIPS Program and other audits that identified instability in requirements and funding levels on joint programs.

Other Matters of Interest

The Joint Program Office had not recognized the need for the Marine Corps' JSIPS unit to remain operational while being upgraded from a developmental model to a production unit. As a result, the Marine Corps could have limited imagery processing capability while its JSIPS unit is being upgraded. The Joint Program Office planned to upgrade the Marine Corps' JSIPS developmental unit to the production configuration at E-Systems, Incorporated, rather than in the field because the upgrade in the plant would cost less. However, after we discussed with officials from the Joint Program Office the adverse effects that the plan could have on the Marine Corps' readiness, the officials decided to upgrade the JSIPS unit in the field rather than at the contractor's activity. Since officials in the Joint Program Office took corrective action on the matter, we did not advance a recommendation in this report on the planned upgrade.

Part II - Finding and Recommendations

Operational Testing

The Joint Program Office, in coordination with the Air Force Operational Test and Evaluation Center, canceled its plans to operationally test and evaluate JSIPS units. The cancellation occurred because the Joint Program Office decided that the JSIPS units did not need to be operationally tested after the DoD restructured the JSIPS Program and canceled planned production. As a result, the DoD will field JSIPS units whose operational effectiveness, suitability, and utility are not fully known.

Background

DoD Instruction 5000.2, Part 8, "Test and Evaluation," states that objectives of test programs are to verify that systems are operationally effective and suitable for intended use in combat. The Instruction requires the responsible program office to prepare a test and evaluation master plan that includes detailed test plans, test objectives, measures of effectiveness, planned operational scenarios, threat simulations, resources, test limitations, and methods of gathering data. Also, the Instruction requires that a test and evaluation program verify the attainment of technical performance specifications and objectives.

Need for Operational Testing

The Joint Program Office, in coordination with the Air Force Operational Test and Evaluation Center, canceled its plan to operationally test and evaluate the JSIPS units. The Joint Program Office canceled the testing program for the JSIPS in 1994 shortly after the DARO discontinued new procurements of JSIPS units.

Since additional production of JSIPS units was not planned by the Office of the Under Secretary of Defense for Acquisition and Technology, we agree with the Joint Program Office that it should have adjusted its testing plans and requirements. However, we do not agree that the Joint Program Office should have totally canceled operational testing. The DoD still needs to determine the effectiveness and suitability of the JSIPS units before the units are used in operational theaters. As such, the Joint Program Office should have prepared a plan for a more economical evaluation, such as a user evaluation, to determine the operational utility of the JSIPS units.

Discussion With Management Officials

We asked officials in the Office of the Director, Operational Test and Evaluation, for their opinion of determining the operational effectiveness and suitability of JSIPS units based on a user evaluation. The officials stated that they agreed with the decision to forego further operational testing since no benefit would be served by additional operational testing. The officials further stated that a user evaluation at this point would provide valuable information to the Joint Program Office before it upgrades two JSIPS engineering developmental model units to the low-rate initial production configuration. The upgrades will provide numerous technical improvements over the engineering developmental model design, including upgrades to the operating system software, the computer hardware, and workstation operating system. The low-rate initial production configuration also includes a new tactical exploitation of national capabilities communications support processor and new secondary image archive tape capabilities.

Officials from the Air Force Operational Test and Evaluation Center also stated that a user evaluation before the upgrades would be beneficial. The officials explained that a user could fully stress and operate a JSIPS unit to determine its operational utility. The user evaluation should identify problems that the Joint Program Office could correct before the planned upgrades.

After the completion of our audit field work, we asked officials in the Marine Corps' Office of the Director, Command, Control, Communication, Computer and Intelligence, whether they would conduct a user evaluation on the Marine Corps' JSIPS unit. The officials stated that they would use the Marine Corps' JSIPS unit in an exercise planned for early 1996 to determine its operational effectiveness and suitability.

Officials in the Joint Program Office said that they will work with the DARO to provide the Marine Corps the funds necessary to conduct the user evaluation.

We commend the Marine Corps' planned exercise and the Joint Program Office's planned funding action. We are making recommendations in this report so that the Services may confirm the corrective actions planned or taken.

Recommendations, Management Comments, and Audit Response

1. We recommend that the Program Manager of the Joint Program Office for the Joint Service Imagery Processing System:

a. Establish measures of effectiveness for determining the operational effectiveness and suitability of Joint Service Information Processing System units.

b. Correct, in upgrades to the two Joint Service Information Processing System engineering and development units, problems identified during the user evaluation.

Air Force Comments. The Deputy Director, Electronics and Special Programs, Office of the Assistant Secretary of the Air Force (Acquisition), concurred with the finding and supported conducting a system operational assessment. The Deputy Director nonconcurred with the draft report's assertion that the operational utility of JSIPS units was unknown. The Deputy Director maintained that the Joint Program Office collected extensive operational effectiveness data on the first JSIPS unit that was delivered to an Army organization. The full text of his comments is in Part IV.

Navy Comments. The Principal Deputy of the Assistant Secretary of the Navy (Research, Development and Acquisition) concurred with the recommendations but deferred to the Joint Program Manager for a detailed response. The full text of his comments is in Part IV.

Audit Response. We consider the Deputy Director's and the Principal Deputy's comments to be responsive to the intent of the recommendations. Therefore, no additional comments are required on Recommendations 1.a. and 1.b.

Based on the Deputy Director's comments, we revised the conclusion in our draft report that the DoD will field a JSIPS unit whose operational effectiveness, suitability, and utility was not known. This report states that the operational effectiveness of the JSIPS unit was not fully known. We agree that the Joint Program Office gathered and analyzed operational data to identify and correct deficiencies in the unit. However, such efforts did not provide for measuring operational effectiveness and suitability against acceptable levels of performance.

2. We recommend that the Marine Corps' Director, Command, Control, Communications, Computer and Intelligence, perform a user evaluation to determine the operational effectiveness and suitability of Joint Service Information Processing System units.

Navy Comments. The Principal Deputy of the Assistant Secretary of the Navy (Research, Development and Acquisition) concurred with the recommendation. He stated that before the next scheduled upgrade of JSIPS units in FY 1997, the Marine Corps will participate in a joint exercise to demonstrate the JSIPS mobility and conduct a thorough user evaluation. With funding from the Defense Airborne Reconnaissance Office, the Marine Corps tentatively plans to participate in a joint exercise "Kernel Blitz" scheduled for 1996.

Audit Response. We consider the Principal Deputy comments to be responsive to the recommendation. Therefore, no additional comments are required on Recommendation 2.

Part III - Additional Information

Appendix A. Prior Audit Coverage

Audit Reports on the JSIPS

General Accounting Office Report No. NSIAD-91-164 (Office of the Secretary of Defense Case Number 8656), "Defense Management Stronger Oversight of Joint Service Imagery Processing System Needed," July 26, 1991. The report stated that the JSIPS Program experienced a program shortfall of \$38 million that caused the program to be restructured, increased developmental costs, extended deliveries, and voided negotiated prices for the production option. The report also stated that the JSIPS Program had not been closely coordinated with related systems and top-level DoD decisionmakers had not received the information needed to act on problems of funding requirements and coordination.

The report recommended that the Secretary of Defense ensure that funding for the JSIPS Program was adequate, the requirements of the Commanders in Chief for joint operations were considered in the development of the JSIPS Program, and interrelated programs were adequately planned and coordinated. To overcome the Services' reluctance to participate in the JSIPS Program and to improve program management and oversight, the General Accounting Office also recommended that the DoD designate the JSIPS Program as a major acquisition program subject to review by the Defense Acquisition Board.

The DoD agreed with the recommendations concerning funding, the requirements of Commanders in Chief, and the coordination of JSIPS Program with other programs. However, the DoD did not agree that the JSIPS Program should be designated as a major program because another initiative within the DoD will provide the DoD the necessary oversight for the JSIPS Program and other related imagery programs.

Inspector General, DoD, Report No. 94-024, "Transportability of Major Weapon and Support Systems," December 27, 1993. The report concluded that the Program Manager of JSIPS overloaded tactical shelters with JSIPS equipment, could pay about \$1.6 million too much for shelters for JSIPS units, and modified trailers that would be used to transport JSIPS units without coordinating the changes with the DoD inventory manager for the trailers. The report recommended that the Program Manager of JSIPS coordinate with the Air Force Shelter Management Office to verify that the overloaded shelters can safely transport the JSIPS units and can be effectively supported in the field. Further, the report recommended that the Program Manager of JSIPS coordinate his future purchases of shelters with the Air Force Shelter Management Office, thereby taking advantage of a lower price available through that office. Regarding the uncoordinated modifications to the trailers, the report

recommended that the Army Space Program Office, in conjunction with the inventory manager for the trailers, verify that the trailers can safely transport JSIPS units and can be effectively supported in the field.

Management concurred with the recommendations requiring that the Army and the Air Force verify the safety and supportability of using the modified shelters and trailers. Concerning the purchase of additional shelters, the Air Force's Deputy Chief of Staff (Logistics) nonconcurred, stating that the use of tailored shelters versus DoD standard shelters was necessary to satisfy the specific transportability requirements of the shelters. Further, the Program Manager of JSIPS stated that the use of standard shelters would increase technical risks and would be unacceptable.

In response to the Deputy Chief's nonconcurrence, the report explained that the recommendation did not direct the procurement of DoD standard shelters but rather to ensure that the Air Force Shelter Management Office assist in achieving the most economical procurement of shelters. The Program Manager of the JSIPS sought and received a waiver from the Air Force Shelter Management Office that allowed him to procure nonstandard shelters.

Audit Reports on Other Joint Programs

The Office of the Assistant Inspector General for Auditing, DoD, has issued several audit reports on joint programs that have experienced problems similar to those experienced on the JSIPS with instability in requirements and funding.

Report No. 95-009, "Audit Report on the Management of the Acquisition of the Tri-Service Standoff Attack Missile," October 12, 1994. The report stated that the management of the Tri-Service Standoff Attack Missile (TSSAM) was fragmented among the three Military Departments resulting in an awkward budgeting process, funding shortfalls, and delays in program and contracting decisions. The report also stated that the Army obtained approval to withdraw from the program in 1994. The Army's withdrawal reduced the program by * missiles. Subsequently, the Navy and the Air Force reevaluated their missile needs and eliminated an additional * missiles. These reductions reduced the production quantity to * which was half the original quantity requirement. If the DoD approved the Air Force's election not to produce one missile variant, then the program could be reduced further.

The report recommended that the Under Secretary of Defense for Acquisition and Technology consolidate the Military Departments' funding of TSSAM into one funding element to provide economical and efficient use of program

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Appendix A. Prior Audit Coverage

resources and more efficient execution of management functions. The report also recommended that the Air Force Program Director of the Tri-Service Standoff Attack Missile revise the program charter to comply with joint program development funding requirements.

The Under Secretary of Defense for Acquisition and Technology nonconcurred with the finding and recommendations, stating that to consolidate funding under one program element would violate DoD Instruction 5000.2, remove control of the program from the user, and put program control under non-users. Further, putting funding control under the DoD would require the staffing of an additional budget fund control element that would be redundant to the identical element within each Service. The recommendation would also add a redundant layer of fund control that would be susceptible to the same strengths and weaknesses of the current system.

The Secretary of the Air Force concurred with the audit finding and recommendations. The Secretary stated that the Air Force would work to stabilize the TSSAM's development, following program adjustments necessitated by DoD's reduced acquisition budget. The Air Force would also work with the prime contractor to limit program turbulence. The Secretary also stated that consolidation of all funding of TSSAM under a single program element during the engineering and manufacturing development was a sound idea but that its utility was of little value since more than 90 percent of the contract funds were already obligated or expended. However, without the concurrence of the Office of the Secretary of Defense to consolidate under a single program element, the Air Force will not modify its tri-Service charter.

The DoD canceled the program in 1994.

Report No. 94-059, "Acquisition of the Joint Tactical Information Distribution System," March 18, 1994. The report stated that production requirements for the Army were not fully funded because of funding cuts and force structure changes. The failure of the Army and the Ballistic Missile Defense Organization (BMDO) to agree on funding the terminal requirements for theater missile defense system programs also contributed to instability within the joint program. As a result, production quantities were insufficient to sustain competition during full-rate production, and an unfunded requirement for an additional * terminals, costing about \$ * million, needed to be funded to satisfy validated Army requirements for weapon systems in the BMDO theater missile defense program.

The report recommended that the Assistant Secretary of Defense (Command, Control, Communications and Intelligence) oversee and resolve the negotiations between the Army and BMDO to fully fund terminal requirements in the FYDP if the Army and BMDO cannot agree on program funding by the end of the third quarter of FY 1994. The report also recommended that the Army Deputy

*For Official Use Only data has been deleted.

Chief of Staff for Operations and Plans provide terminal funding in the FYDP in accordance with the agreement reached with BMDO and that the Assistant Deputy Chief for Theater Missile Defense, BMDO, provide terminal funding in the FYDP in accordance with the funding agreement with the Army.

The Director, Theater and Tactical Command, Control, and Communications, Office of the Assistant Secretary of Defense (Command, Control, Communications and Intelligence), and the Director, BMDO, agreed that the Army and BMDO needed to agree on funding the terminals requirements but nonconcurred with the three recommendations. Both Directors stated that the issue requiring resolution between the Army and BMDO was isolated to the funding of the Army terminals needed to satisfy the Patriot PAC-3 requirements. The Army and BMDO have concerns about Patriot PAC-3 requirements below the battalion level. The Army was reevaluating this requirement. BMDO stated that its decision to commit additional funds for Army terminals was pending the results of the Army's review anticipated to be completed in the third quarter of FY 1994.

In response to management's comments, the report stated that the action taken to resolve the issue by the end of the third quarter was encouraging. However, the report reaffirmed the belief that the Assistant Secretary of Defense (Command, Control, Communications and Intelligence) must get involved to ensure terminal requirements are fully funded in the FYDP if the Army and BMDO cannot agree by the end of the third quarter of FY 1994.

In July 1994, officials from both the Army and the BMDO briefed their agreed-to requirements and funding responsibilities to officials from the Office of the Assistant Secretary of Defense (Command, Control, Communications, and Intelligence). The officials stated that they had programmed the funding necessary to procure the required terminals.

Report No. 91-125, "Waivers and Deviations to Production Contracts for the Airborne Self-Protection Jammer Program," September 30, 1991. The report stated that the Navy acquisition strategy for the Airborne Self-Protection Jammer (ASPJ) Program was outdated and no longer adequately justified from an economic and risk management standpoint. The acquisition strategy had not been revised in consideration of the Air Force's withdrawal from the program in December 1989 and subsequent reductions in Navy aircraft program. In December 1989, the Air Force terminated its participation in the ASPJ Program because of cost constraints; the cost constraints resulted in reductions of 1,509 ASPJs. Also, the Navy decreased its requirements for the ASPJ by 438 units. These reductions decreased procurement quantities from 2,303 units to 356 units. The Navy could reduce procurement cost and program risk by proceeding directly into full-rate production and conduct competitive

Appendix A. Prior Audit Coverage

procurement between the two joint ventures for the remaining units that have not been purchased instead of awarding noncompetitively these units equally between the joint ventures as provided in the original acquisition strategy.

The audit report recommended that the Under Secretary of Defense for Acquisition (renamed Under Secretary of Defense for Acquisition and Technology) proceed directly to a FY 1992 Milestone III full-rate production and deployment decision on the ASPJ program and not authorize additional low-rate initial production. Also, the Navy should direct the timely issuance of a competitive solicitation for a firm-fixed price contract with annual procurement options for the remaining ASPJ program with the contract award to occur after the Defense Acquisition Board review at the Milestone III full-rate production and deployment decision point. Further, the report recommended that the Navy allocate the funds designated for the ASPJ low-rate initial production under the Defense agency's budget line to the other three jammer programs in accordance with Public Law 101-511, "Department of Defense Appropriations Act of Fiscal Year 1991."

The Under Secretary of Defense for Acquisition partially concurred with the recommendations. The Under Secretary of Defense for Acquisition concurred with the need for a competitive buyout of the ASPJ Program following completion of operational testing. However, the Under Secretary stated that an additional low-rate initial production award is needed in FY 1991 to maintain the established production base and to avoid an estimated \$ * million cost increase in the ASPJ's overall life-cycle cost if a break occurs in production. The Under Secretary of Defense for Acquisition justified the need to sustain the production base at the contractors until a competitive selection is made in FY 1992. The primary factor in this justification is the increase in the required units to * from the * after the issuance of the draft audit report.

Because of this increase, the decision to proceed with another low-rate initial production was an acceptable alternative to the report's recommendation. The Under Secretary of Defense for Acquisition also stated that he was sensitive to concerns that the Program not proceed at a rate higher than necessary to sustain minimum essential production.

With regard to the allocation of funds to the three other jammer programs, the Under Secretary of Defense for Acquisition did not concur, stating that the DoD would incur an estimated \$ * million cost increase if contract award was delayed in 1992 because of a break in production.

The DoD canceled the program in 1992 because it did not pass operational testing.

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Appendix B. Audit Conclusions on Other Matters

We did not identify significant problems in the program management elements of requirements evolution and affordability, acquisition planning and risk management, engineering and manufacturing, logistics and other infrastructure, contract performance measurement, and contracting.

Requirements Evolution and Affordability. We did not audit the quantitative or qualitative requirements for the JSIPS because Inspector General, DoD, Project No. 4RC-0055, "Audit of the Interoperability of Imagery Dissemination Systems," is evaluating those matters. That audit is to evaluate DoD compliance with governing policies, regulations, directives, and instructions as they relate to interoperability and requirements for secondary imagery dissemination systems. Also, that audit will determine whether requirements and standards are implemented throughout the DoD to ensure interoperability of secondary imagery dissemination systems.

Acquisition Planning and Risk Management. We performed a limited review of acquisition planning and risk management since the DoD decided not to acquire additional JSIPS units.

Engineering and Manufacturing. Since the DoD did not plan to acquire more JSIPS units, we considered this area to have little risk and performed a limited review.

Logistics and Other Infrastructure. The Joint Program Office decided that the prime contractor would provide logistics support for JSIPS units. Considering the small quantity of systems that the DoD bought, we believe contractual support was a more economical choice than the DoD establishing its own support base.

Contract Performance Measurement. Since the only contract requiring the contractor to report cost information was about 95 percent complete, we did not perform a detailed review of this area.

Contracting. Since the DoD did not plan to acquire more JSIPS units, we performed only a limited review in this area. The review did not identify problems other than the other matter of interest described in Part I of the report.

Appendix C. Summary of Potential Benefits Resulting From Audit

Recommendation Reference	Description of Benefit	Amount and/or Type of Benefit
1.a.	Program Results. Provides for the Joint Program Office to establish measures of effectiveness to determine the operational effectiveness and suitability of JSIPS units.	Nonmonetary.
1.b.	Program Results. Provides for the deficiencies identified during the user evaluation to be corrected when the JSIPS units are upgraded.	Nonmonetary.
2.	Economy and Efficiency. Provides for the Marine Corps to perform a user evaluation for the Joint Program Office.	Nonmonetary.

Appendix D. Organizations Visited or Contacted

Office of the Secretary of Defense

Office of the Under Secretary of Defense for Acquisition and Technology, Washington, DC

Office of the Assistant Secretary of Defense (Command, Control, Communications and Intelligence), Washington, DC

Defense Aerial Reconnaissance Office, Washington, DC

Department of the Army

525 Military Intelligence Brigade, XVIII Airborne Corps, Fort Bragg, NC
Army Space Program Office, Fairfax, VA

Department of the Navy

Naval Air Systems Command, Arlington, VA

Joint Service Imagery Processing System Program Office, Arlington, VA

Marine Corps Systems Command, Quantico, VA

Marine Corps Expeditionary Force I, Camp Pendleton, CA

Marine Corps Expeditionary Force II, Camp Lejeune, NC

Marine Corps Expeditionary Force II, Cherry Point, NC

Office of the Marine Corps Director, Command, Control, Communications, Computer and Intelligence Department, Arlington, VA

Department of the Air Force

Office of the Assistant Secretary of the Air Force (Acquisition), Washington, DC

Electronics Systems Center, Joint Program Office, Hanscom Air Force Base, Bedford, MA

Other Defense Organizations

Defense Contract Management Area Operations, Dallas, TX

Defense Contract Audit Agency, E-Systems, Incorporated, Dallas TX

Appendix D. Organizations Visited or Contacted

Contractor

E-Systems, Incorporated, Dallas, TX

Appendix E. Report Distribution

Office of the Secretary of Defense

Under Secretary of Defense for Acquisition and Technology
Director, Defense Logistics Studies Information Exchange
Under Secretary of Defense (Comptroller)
Deputy Chief Financial Officer
Deputy Comptroller (Program/Budget)
Assistant Secretary of Defense (Command, Control, Communications and Intelligence)
Assistant to the Secretary of Defense (Public Affairs)

Department of the Army

Auditor General, Department of the Army

Department of the Navy

Assistant Secretary of the Navy (Financial Management and Comptroller)
Marine Corps Director, Command, Control, Communications, Computer and Intelligence
Auditor General, Department of the Navy

Department of the Air Force

Assistant Secretary of the Air Force (Acquisition)
Assistant Secretary of the Air Force (Financial Management and Comptroller)
Air Force Materiel Command
Headquarters, Electronic Systems Center
Joint Service Imagery Processing System Joint Program Office
Auditor General, Department of the Air Force

Other Defense Organizations

Director, Defense Logistics Agency
Director, Defense Contract Audit Agency

Appendix E. Report Distribution

Other Defense Organizations (cont'd)

Director, National Security Agency
Inspector General, National Security Agency

Non-Defense Federal Organizations

Office of Management and Budget
Technical Information Center, National Security and International Affairs Division,
U.S. General Accounting Office

Chairman and ranking minority member of each of the following congressional committees and subcommittees:

Senate Committee on Appropriations
Senate Subcommittee on Defense, Committee on Appropriations
Senate Committee on Armed Services
Senate Select Committee on Intelligence
Senate Committee on Governmental Affairs
House Committee on Appropriations
House Subcommittee on National Security, Committee on Appropriations
House Committee on Government Reform and Oversight
House Subcommittee on National Security, International Affairs, and Criminal
Justice, Committee on Government Reform and Oversight
House Permanent Select Committee on Intelligence
House Committee on National Security

Part IV - Management Comments

Department of the Air Force Comments



DEPARTMENT OF THE AIR FORCE
WASHINGTON DC



03 AUG 1995

OFFICE OF THE ASSISTANT SECRETARY

MEMORANDUM FOR ASSISTANT INSPECTOR GENERAL FOR AUDITING,
OFFICE OF THE INSPECTOR GENERAL,
DEPARTMENT OF DEFENSE

FROM: SAF/AQL

SUBJECT: Acquisition of the Joint Service Imagery Processing System, DoD IG Project
Number 5AL-0004

This is in reply to your request for Air Force comments on the subject report.

In general we concur with the DoD IG findings and support conducting a system operational assessment; however, we nonconcur with the assessment that the "DoD will field a JSIPS unit whose operational effectiveness, suitability, and utility are unknown." This assessment was based on the Air Force decision to not conduct Initial Operational Test and Evaluation (IOT&E). The USMC will perform a system operational assessment during the anticipated Mar/Apr 95 deployment of their EDM JSIPS currently located at Camp Pendleton.

The JSIPS program developed and fielded two Engineering Development Models (EDMs) with a common hardware/software baseline. The first EDM was delivered to the Army at Mainz Finthen AB, Germany. The JSIPS transition to the Army occurred in April 1993 and was operationally employed until May 1994. On average, the system produced 300 target reports and disseminated 25 secondary images per week. The second EDM system was provided to the USMC.

Since the Army system was covered under warranty, a formal Field Notification (FN)/Field Problem Reporting (FPR) system was used to track and correct deficiencies. System operators, maintainers, and contractor Field Service representatives (FSRs) submitted FNs whenever system deficiencies were noted. These FNs were either resolved by the FSRs or were translated into FPRs for resolution by the contractor engineering staff. Of the 42 FPRs generated during this 14 month period, 37 were resolved via Army system hardware/software upgrades. The remaining five were resolved via upgrades to the Marine Corps system at Camp Pendleton. The high degree of commonality that exist between the Army and Marine Corps systems make the Army system experience applicable to the Marine Corps. Consequently, extensive operational effectiveness, suitability, and utility data has been collected, despite the lack of IOT&E.


In addition to the on-site-development and security accreditation testing, the Air Force Operational Test and Evaluation Center (AFOTEC) conducted an operational assessment of the system. Results of the assessment were briefed to the Air Force Systems Acquisition

Department of the Air Force Comments

Review Council (AFSARC) in Jan 93 and resulted in the positive decision to procure a Low Rate Initial Production (LRIP) system for the Air Force. The briefing charts are available from my JSIPS POC. We believe the operational effectiveness, suitability, and utility have been demonstrated for the JSIPS EDM systems. However, we agree the operational effectiveness and suitability of any future upgrades to the original JSIPS need to be evaluated.

My JSIPS point of contact is Capt Dwayne Frye, SAF/AQLJ, (703) 695-6242.

cc:
SAF/FMPF (Mr. Morford)
ESC/ICI (Mr. Bleu)



OSCAR W. JOHNSTON, Colonel, USAF
Dep Dir, Electronic & Special Programs
Assistant Secretary
of the Air Force (Acquisition)

Department of the Navy Comments



DEPARTMENT OF THE NAVY
OFFICE OF THE ASSISTANT SECRETARY
RESEARCH, DEVELOPMENT AND ACQUISITION
1000 NAVY PENTAGON
WASHINGTON DC 20350-1000

AUG 10 1995

MEMORANDUM FOR DEPARTMENT OF DEFENSE ASSISTANT INSPECTOR
GENERAL FOR AUDITING

SUBJ: DRAFT REPORT ON THE ACQUISITION OF THE JOINT SERVICE IMAGERY
PROCESSING SYSTEM (PROJECT NO. 5AL-0004)

Ref: (a) DODIG Memo of 31 May 95

Encl: (1) DON Response to the Subject Draft Audit Report

I am responding to the draft audit report forwarded by reference (a) concerning the acquisition of the Joint Service Imagery Processing System (JSIPS).

The Department of the Navy response is provided at enclosure (1). We generally agree with the draft report finding and recommendations. As outlined in the enclosed comments, the Department is planning to take actions to ensure the operational effectiveness of JSIPS is acceptable prior to the next upgrade of JSIPS (schedules for Fiscal Year 1997).

A handwritten signature in black ink, appearing to read "W. C. Bowes".

W. C. BOWES
Vice Admiral, U.S. Navy
Principal Deputy

Copy to:
NAVINGEN
Office of Financial Operations (FMO-13)

**DEPARTMENT OF THE NAVY COMMENTS
ON
DODIG DRAFT AUDIT REPORT
ON ACQUISITION OF THE
JOINT SERVICE IMAGERY PROCESSING SYSTEM
PROJECT NO. 5AL-0004**

FINDING

"The Joint Program Office, in coordination with the Air Force Operational Test and Evaluation Center, canceled its plans to operationally test and evaluate JSIPS units. The cancellation occurred because the Joint program Office decided that the JSIPS units did not need to be operationally tested after the DOD restructured the JSIPS Program and canceled planned production. As a result, the DOD will field a JSIPS unit whose operational effectiveness, suitability, and utility are unknown."

DON RESPONSE: Concur.

RECOMMENDATION 1

"We recommend that the Program Manager of the Joint Program Office for the Joint Service Imagery processing System:

- a. Establish measures of effectiveness for determining the operational effectiveness and suitability of Joint Service Imagery Processing System units.
- b. Correct, in upgrades to the two Joint Service Imagery Processing System engineering and development units, problems identified during the user evaluation."

DON RESPONSE: Concur, but defer to JSIPS Program Manager for specifics.

RECOMMENDATION 2

"We recommend that the Marine Corps Director, Command, Control, Communications, Computer and Intelligence, perform a user evaluation to determine the operational effectiveness and suitability of Joint Service Imagery Processing Systems units."

DON RESPONSE: Concur. Prior to the next scheduled JSIPS upgrade (anticipated in FY 1997), the Marine Corps will participate in a joint exercise in order to demonstrate the system's mobility and conduct a thorough user evaluation. With a commitment from the Defense Airborne Reconnaissance Office (DARO) to fund the deployment, the Marine Corps is in the process of determining which exercise would be most appropriate. Kernel Blitz - 96, tentatively scheduled for early 1996, is the most likely exercise, but must be assessed to ensure that it will fully meet the evaluation requirements. The DODIG will be notified when a specific exercise is selected.

Enclosure (1)

Audit Team Members

This report was produced by the Acquisition Management Directorate,
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